

| L Number | Hits | Search Text | DB | Time stamp |
|----------|---------|--|---|------------------|
| 1 | 5806 | ((514/467) or (514/475) or (514/544) or (514/546) or (514/640) or (514/617) or (514/717) or (549/430) or (549/453) or (549/550) or (558/388) or (560/56) or (560/57) or (560/221) or (564/180) or (564/265)).CCLS. | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/10/06 12:44 |
| 2 | 3282960 | 2002.py. or 2003.py. | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/10/06 12:44 |
| 3 | 521 | ((514/467) or (514/475) or (514/544) or (514/546) or (514/640) or (514/617) or (514/717) or (549/430) or (549/453) or (549/550) or (558/388) or (560/56) or (560/57) or (560/221) or (564/180) or (564/265)).CCLS.) and (2002.py. or 2003.py.) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/10/06 12:44 |

L16 ANSWER 25 OF 132 CAPLUS COPYRIGHT 1999 ACS

AN 1989:113878 CAPLUS

DN 110:113878

TI Reactions of carboxylic acids with phosphonium anhydrides

AU Hendrickson, James B.; Hussoin, M. Sajjat

CS Edison Chem. Lab., Brandeis Univ., Waltham, MA, 02254, USA

SO J. Org. Chem. (1989), 54(5), 1144-9

CODEN: JOCEAH; ISSN: 0022-3263

DT Journal

LA English

OS CASREACT 110:113878; CJACS

AB General considerations are outlined for a reagent to ext. oxygen from org.

mols. by an equiv. of dehydration. The reagent $(\text{Ph}_3\text{P}^+)\text{O}_2^-(\text{OTf})^-$ (OTf = triflate) was created for the purpose and subjected to a preliminary study. The reagent convert carboxylic acids readily and rapidly to anhydrides, esters, amides, amidines, benzimidazoles, and cyclic aryl ketones in good yields. Thus, treatment of 4-MeC₆H₄CO₂H with Ph₃PO in

the

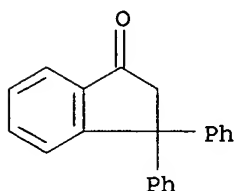
presence of triflic anhydride and Et₃N gave 93% p-toluic anhydride.

IT **55010-17-8P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 55010-17-8 CAPLUS

CN 1H-Inden-1-one, 2,3-dihydro-3,3-diphenyl- (9CI) (CA INDEX NAME)



L16 ANSWER 105 OF 132 CAPLUS COPYRIGHT 1999 ACS

AN 1971:75859 CAPLUS

DN 74:75859

TI Thermolysis of substituted indenenes. Sigmatropic phenyl and hydrogen migrations

AU Miller, Larry Lee; Boyer, Rodney F.

CS Dep. Chem., Colorado State Univ., Fort Collins, Colo., USA

SO J. Amer. Chem. Soc. (1971), 93(3), 650-6

CODEN: JACSAT

DT Journal

LA English

AB 1,1,3-Triphenylindene, 1,1-diphenylindene, 1-methyl-1-phenylindene, and 1,3-diphenylindene rearrange at 250-300.degree. via a 1,2-phenyl migration. The resp. products formed are 1,2,3-triphenylindene, 2,3-diphenylindene, 3-methyl-2-phenylindene, and 2,3-diphenylindene. These reactions in Ph2O are kinetically first order. The rate const. for 1,1,3-triphenylindene rearrangement is unaffected by added acid, base, or free-radical scavengers. .DELTA.S.noteq. for this phenyl migration is

-25 entropy units. Solvation of the transition state for rearrangement accounts for a portion of this very neg. value as is indicated by the relative rates of rearrangement in solvent Decalin (2.45), Ph2O (8.34), .omicronmicron.-cresol (8.8), and HCONMe2 (16.5). In contrast, H rearrangement from the 1 to the 2 position of 1-phenylindene shows no solvent effect

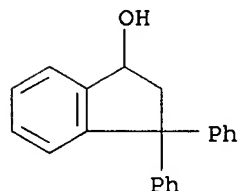
and .DELTA.S.noteq. -2.3 entropy units. Studies of H (D) rearrangement in 1-deuterioindene, 1-phenylindene, and 1,3-diphenyl-1-deuterioindene at 150.degree. allow estn. of Ph substituent effects on sigmatropic H rearrangement. A 1-Ph accelerates migration by about 130 and 3-Ph by 6. Accelerative substituent effects on Ph migration are similar: 1-Ph (50), 3-Ph (5), 1-Me (8). These results are interpreted in terms of the transition state connecting reactant indene with an isoindene intermediate. The data reveal a migratory aptitude series H > Ph > Me which is detd. by the more effective bridging capabilities of H compared to C.

IT 31366-71-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 31366-71-9 CAPLUS

CN 1-Indanol, 3,3-diphenyl- (6CI, 8CI) (CA INDEX NAME)



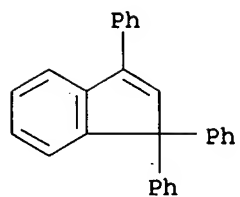
IT 4614-01-1 18636-52-7

RL: PRP (Properties); RCT (Reactant)
(rearrangement of, kinetics of)

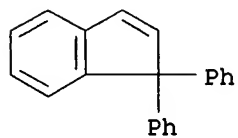
RN 4614-01-1 CAPLUS

CN 1H-Indene, 1,1,3-triphenyl- (9CI) (CA INDEX NAME)

08/975,391



RN 18636-52-7 CAPLUS
CN 1H-Indene, 1,1-diphenyl- (9CI) (CA INDEX NAME)



=> d i d e r s d f a 153

L53 ANSWER 1 OF 2 BEILSTEIN COPYRIGHT 1998 BEILSTEIN CD&S

Beilstein Reg. No. (BRN): 4924895 Beilstein
Molecular Formula (MF): C21 H17 N O . Cl H
Lin. Struct. Formula (LSF): C21H17NO*HCl
Chemical Name (CN): 3,3-diphenyl-indan-1-one oxime ;
hydrochloride
3,3-Diphenyl-indan-1-on-oxim; Hydrochlorid
Beilstein Reference (SO): 2-07-00-00496

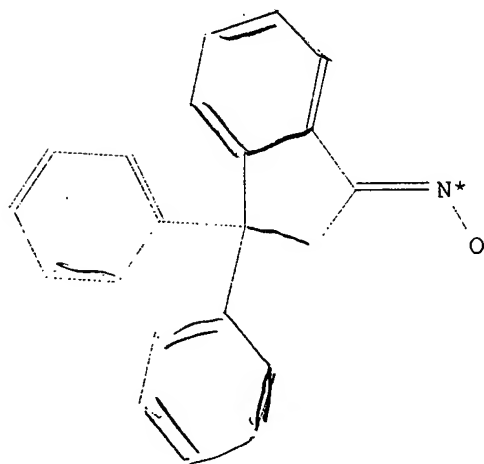
Component Data:

| Component | Component | Formula | Lawson Number |
|-----------|----------------|---------|---------------|
| Reg. No. | Molec. Formula | Weight | |
| (CBRN) | (CMF) | (FW) | (LN) |
| 3373716 | C21 H17 N O | 299.37 | 7644 |
| 1098214 | Cl H | 36.46 | |

CM 1

CBRN 3373716

CMF C21 H17 N O



CM 2

CBRN 1098214

CMF Cl H

Ring System Data:

Component BRN (CBRN): 3373716
 Number of Rings (CNR): 4
 Ring Systems (CNRS): 3
 Diff. Ring Systems (CNDRS): 2
 Ring Heteros (CNRH): 0
 Acyclic Heteros (CNAH): 2

| Beilstein Ring Index (BRIX) | Ring System Formula (RF) | BRIX Count |
|--------------------------------|-----------------------------|---------------|
| 9.2.5-0.0-3.3 | C9 | 1 |
| 6.1.0-0.0-3.1 | C6 | 2 |

Component BRN (CBRN): 1098214
 Number of Rings (CNR): 0
 Acyclic Heteros (CNAH): 1

Field Availability:

| Code | Name | Occur. (OCC) |
|------|------------------------------|-----------------|
| MF | Molecular Formula | 1 |
| LSF | Linearized Structure Formula | 1 |
| CN | Chemical Name | 2 |
| FW | Formula Weight | 2 |
| SO | Beilstein Citation | 1 |
| LN | Lawson Number | 1 |
| SF | Stereo Family | 1 |
| MP | Melting Point | 1 |

=> d mp

L53 ANSWER 1 OF 2 BEILSTEIN COPYRIGHT 1998 BEILSTEIN CD&S

Melting Point:

| Value | Ref. | Note |
|-------|------|------|
| (MP) | | |
| (Cel) | | |

| | | |
|--------|---|---|
| 175.00 | 1 | 1 |
|--------|---|---|

Reference(s):

1. Gagnon, Ann.Chim.(Paris), <10> 12 <1929>, 315, CODEN: ANCPAC

Notes(s):

1. Handbook Data